

2.4 Socioeconomic Variables

The trip generation models in the AZTDM use household data and employment to estimate travel activity. Special generators are used for major airports, universities, national parks, and military installations.

Households

The AZTDM uses estimates of households by STAZ for trip generation. A household is a person or group of people who occupy a dwelling unit as their usual place of residence. For trip generation, the AZTDM categorizes STAZ households based on income, the number of workers per household, and the number of persons per household, using input from the year 2000 Census Transportation Planning Package (CTPP).

Employment

The AZTDM use three broad employment classifications in its trip generation model:

- Industrial Employment
- Service Employment
- Retail Employment

Industrial sector employment broadly includes construction, mining, and other resource extraction jobs, as well as manufacturing. Service sector employment broadly includes financial, insurance, real estate, transportation, health, legal, government, and other services. Retail sector employment broadly includes retail and wholesale trade.

Special Generators

Key special generators for both work and non-work trips include Phoenix Sky Harbor International Airport, Tucson International Airport, Fort Huachuca, Yuma Proving Grounds, Davis-Monthan Air Force Base, Luke Air Force Base, Grand Canyon National Park, University of Arizona, Arizona State University, and Northern Arizona University. National Forest lands are also a special generator work and non-work trips.

Population

As population is not explicitly used in the AZTDM to estimate travel activity, population estimates are provided for reference only. The AZTDM population estimates do not include people living in group quarters. Group quarters include college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities workers' dormitories, and facilities for people experiencing homelessness. The AZTDM population estimates represent people living in households.

2.5 Year 2005 Socioeconomic Data

Household and employment data was compiled from numerous sources to prepare a base year 2005 socioeconomic database. Sources for each of the seven study areas are detailed in the text below. Table 2-1 shows year 2005 population and employment estimates by county. Figure 2-17 shows Arizona estimated population and employment density for years 2005, 2030, and 2050. Figures 2-18 to 2-32 show the estimated year 2005 population density together with projected employment density for years 2030 and 2050 by county. Appendix A shows detailed population and employment estimates by STAZ for each county.

As a reasonableness check, the ADOT team compared the AZTDM population estimates compiled for each study area with Census 2000 population counts and year 2005 DES